

(Attention!)

" plant(s) " in this English translation includes both " a kind of plant " and " plural kinds of plants ". Please use an appropriate term at your end.

CLAIMS

Claim 1. A manufacturing method for an anion adsorbing carbon material characterized in that a raw material which comprises plant(s) is contacted with a solution including calcium ions, and after that, carbonized, and subsequently, contacted with an acid solution.

Claim 2. A manufacturing method for an anion adsorbing carbon material characterized in that a raw material which comprises plant(s) with which a solution including calcium ions have contacted is carbonized and the carbonized material is contacted with an acid solution.

Claim 3. A manufacturing method for an anion adsorbing carbon material characterized in that a carbonized material gained by carbonizing a raw material which comprises plant(s) with which a solution including calcium ions have contacted is contacted with an acid solution.

Claim 4. A manufacturing method for an anion adsorbing carbon material characterized in that a raw material which comprises plant(s) is contacted with a solution including a metal chloride, and after that, carbonized, and the above described metal chloride is contained within this carbonized material.

Claim 5. A manufacturing method for an anion adsorbing carbon material characterized in that a raw material which comprises plant(s) with which a solution including a metal chloride have contacted is carbonized and the above described metal chloride is contained within this carbonized material.

Claim 6. The manufacturing method for an anion adsorbing carbon material according to claim 4 or 5, wherein 2% to 25% of the metal chloride which combines within the carbonized material is contained as ash content.

Claim 7. The manufacturing method for an anion adsorbing carbon material according to any of Claims 4 to 6, wherein the above described carbonized material is contacted with water

and/or an acid.

Claim 8. The manufacturing method for an anion adsorbing carbon material according to any of Claims 4 to 7, wherein the above metal chloride is CaCl_2 or BaCl_2 .

Claim 9. An anion adsorbing carbon material characterized by being manufactured by the manufacturing method for an anion adsorbing carbon material according to any of Claims 1 to 8.

Claim 10. The anion adsorbing carbon material characterized by being gained by removing the adsorbed anions from the anion adsorbing carbon material according to Claim 9 which has adsorbed anions and combining anions which can be ion exchanged with anions which are the next object of adsorption with the carbon material in place of the above described removed anions.

Claim 11. A manufacturing facilities for an anion adsorbing carbon material characterized by comprising a carbonization apparatus for carbonizing a raw material which comprises plant(s) and an apparatus for contacting a carbonized material which is produced by this carbonization apparatus with an acid solution.

Claim 12. A manufacturing facilities for an anion adsorbing carbon material characterized by comprising an apparatus for contacting a raw material which comprises plant(s) with a solution including calcium ions, a carbonization apparatus for carbonizing the above described material after it has been contacted with the solution, and an apparatus for contacting the carbonized material which has been produced by this carbonization apparatus with an acid solution.

Claim 13. The manufacturing facilities for an anion adsorbing carbon material according to Claim 11 or 12, wherein the carbonization apparatus allows for the formation of pores inside the carbonized material originating from plant(s), as well as the formation of a great number of functional groups on these walls of the micro pores, and the apparatus for contacting the carbonized material with an acid solution allows for the combination of the above described functional groups with anions which can be ion exchanged with anions that are the object of absorption directly or via calcium ions.

Claim 14. A manufacturing facilities for an anion adsorbing carbon material characterized by comprising a carbonization apparatus for carbonizing a raw material which comprises

plant(s) which has contacted with a solution including a metal chloride.

Claim 15. A manufacturing facilities for an anion adsorbing carbon material characterized by comprising an apparatus for contacting a raw material which comprises plant(s) with a solution including a metal chloride and a carbonization apparatus for carbonizing the above described material after it has contacted with the solution.

Claim 16. The manufacturing facilities for an anion adsorbing carbon material according to Claim 14 or 15, wherein the above carbonization apparatus carbonizes a raw material which comprises plant(s), form micro pores inside, and draw out a great number of functional groups to the surface of the walls of these micro pores, and combine anions which can be ion exchanged with anions that are the object of adsorption directly or via metal ions.

Claim 17. The manufacturing facilities for an anion adsorbing carbon material according to any of Claims 14 to 16, wherein an apparatus for contacting a carbonized material which has been created by the above described carbonization apparatus with water and/or an acid solution, to remove extra crystal of the metal chloride which adheres to the carbonized material, and to increase anion adsorbing ability.

Claim 18. The manufacturing facilities for an anion adsorbing carbon material according to any of Claims 11 to 17, wherein a drying area for an intermediate body for gaining an anion adsorbing carbon material is provided so that the above described intermediate body is dried in this drying area using heat discharged from the carbonization apparatus.